1981 Authors Index

A

ANDERSEN, Melvin E.: Prediction of *in vivo* Kinetic Constants for Metabolism of Inhaled Vapors from Kinetic Constants Measured *in vitro* 403
AYRES, J.A.: Inhalation Toxicity of Acrylic Acid 271
Inhalation Toxicity of Butylene Oxide 319
Metabolism of Acrylate Esters in Rat Tissue Homogenates 410

B

BALAZS, Tibor: Assessment of Hepatic Function in Rabbits with Steroid-induced Cholestatic Liver Injury 329
Enhancement of Cardiotoxic Effects of β-adrenergic Bronchodilators by Aminophylline in Experimental Animals 443
BALDWIN, B.H.: Assessment of Hepatic Function in Rabbits with Steroid-induced Cholestatic Liver Injury 329
BECK, O.: Quantitation of Free Soman in Nervous Tissue and Blood — A Preliminary Communication 148
BECKING, George C.: Recent Advances in the Toxicity of Heavy Metals — An Overview 348
BEETHE, R.L.: Evaluation of a Multitiered Inhalation Exposure Chamber 8
BENSCHOP, H.P.: GLC-analysis and Pharmacokinetics of the Four Stereoisomers of Soman 177
BERENDS, F.: GLC-analysis and Pharmacokinetics of the Four Stereoisomers of Soman 177
Problems in the Therapy of Soman Poisoning 183
BIANCHINE, Joseph R.: Controlled Clinical Evaluations of Chlorine Dioxide, Chlorite and Chlorate in Man 334
BLAKE, David A.: Absence of Mutagenic Activity of Trifluoroethanol and its Metabolites in *Salmonella Typhimurium* 415
BLANKE, R.V.: Chlordecone Alcohol Formation in the Mongolian Gerbil *(Meriones Unguiculatus)*: A Model for Human Metabolism of Chlordecone (Kepone) 293
BLOHM, T.R.: Toxicity and Teratogenicity Studies with the Hypolipidemic Drug RMI 14,514 in Rats 19
BLOOM, Sherman: Enhancement of Cardiotoxic Effects of β-adrenergic Bronchodilators by Aminophylline in Experimental Animals 443
BOELSTERLI, U.: Assessment of Hepatic Function in Rabbits with Steroid-induced Cholestatic Liver Injury 329
BOND, James A.: Induction of Hepatic and Testicular Lesions in Fischer-344 Rats by Single Oral Doses of Nitrobenzene 389
BOSKOVIC, Bogdan: The Treatment of Soman Poisoning and its Perspectives 203
BRACKEN, William M.: The Effects of Select Neurotoxic Chemicals on Synaptosomal Monoamine Uptake and K^+-dependent Phosphatase 432
BRECKENRIDGE, C.: Six Month Inhalation Studies of Pirbuterol Acetate Aerosol in the Beagle Dog and Squirrel Monkey 426
BROOKS, A.L.: Mutagenicity of Diesel Exhaust Particle Extracts: Influence of Car Type 260
BROWN, Burnell R., Jr.: Detection of Covalently Bound Halothane Metabolites in the Hypoxic Rat Model for Halothane Hepatotoxicity 255
BURACK, Thomas S.: Cancer: I. Analysis of Recent New Case Incidence Reports 458
BURACK, W.R.: Cancer: I. Analysis of Recent New Case Incidence Reports 458
BURNETT, C.: Heritable Translocation Study on Two Hair Dye Formulations 325

C

CARLSON, Gary P.: The Role of Methemoglobin in Acute Butyl Nitrite Toxicity in Mice 448
CARLTON, William W.: Re-examination of the ED_{01} Study — Audit of Pathology 64
CASTLEMAN, W.L.: Assessment of Hepatic Function in Rabbits with Steroid-induced Cholestatic Liver Injury 329
CHAUHAN, Sudha: Controlled Clinical Evaluations of Chlorine Dioxide, Chlorite and Chlorate in Man 334
CHISM, John P.: Induction of Hepatic and Testicular Lesions in Fischer-344 Rats by Single Oral Doses of Nitrobenzene 389
CLARK, C.R.: Mutagenicity of Diesel Exhaust Particle Extracts: Influence of Car Type 260
CLARKSON, Thomas W.: Role of Chelating Agents in Metal Toxicity 376
CLEMENT, John G.: Toxicology and Pharmacology of Bispyridinium Oximes — Insight into the Mechanism of Action vs Soman Poisoning *in vivo* 193
Differences in the Toxicity of Soman in Various Strains of Mice 419
CORBETT, J.: Heritable Translocation Study on Two Hair Dye Formulations 325
CLAYSON, David: Re-examination of the ED_{01} Study — Summary and Conclusions 127

D

de JONG, L.P.A.: GLC-analysis and Pharmacokinetics of the Four Stereoisomers of Soman 177
DEYI, Xia: The Inhibition and Protection of Cholinesterase by Physostigmine and Pyridostigmine Against Soman Poisoning *in vivo* 217
DiBLASI, Marcia C.: Absence of Mutagenic Activity of Trifluoroethanol and its metabolites in *Salmonella Typhimurium* 415

DOTZLAF, Lizabeth A.: Lack of Protection by Ascorbic Acid from Lethality Resulting from Exposure to 1 Atm O_2 386
DROBECK, Hans P.: The Ototoxicity of Hydroxygentamicin, a New Aminoglycoside Antibiotic, in Guinea Pigs 395

E

ELSMORE, Timothy F.: Circadian Susceptibility to Soman Poisoning 238

F

FONNUM, Frode: Factors Modifying the Toxicity of Organophosphorous Compounds Including Soman and Sarin 143
FRAZIER, John M.: Effect of Excess Zinc on Cadmium Disappearance from Rat Plasma Following Intravenous Injection 452

G

GALL, David:: The Use of Therapeutic Mixtures in the Treatment of Cholinesterase Inhibition 214
GANDOLFI, A. Jay: Detection of Covalently Bound Halothane Metabolites in the Hypoxic Rat Model for Halothane Hepatotoxicity 255
GIBSON, J.P.: Toxicity and Teratogenicity Studies with the Hypolipidemic Drug RMI 14,514 in rats 19
GONCI, D.A.: Six Month Inhalation Studies of Pirbuterol Acetate Aerosol in the Beagle Dog and Squirrel Monkey 426
GORDON, Gary B.: Absence of Mutagenic Activity of Trifluoroethanol and its Metabolites in *Salmonella Typhimurium* 415
GRAY, Jack E.: Appraisal of the Intramuscular Irritation Test in the Rabbit 290
GRIFFIS, L.C.: Evaluation of a Multitiered Inhalation Exposure Chamber 8
GUZELIAN, P.S.: Chlordecone Alcohol Formation in the Mongolian Gerbil *(Meriones Unguiculatus)*: A Model for Human Metabolism of Chlordecone (Kepone) 293

H

HAHN, Fletcher F.: Ocular Toxicity of 2,2,2-trifluoroethanol in Rabbits 313
HAMMOND, P.B.: Renal Reabsorption and Secretion of δ-aminolevulinic Acid in the Rat 278
HAND, B.T.: Differences in the Toxicity of Soman in Various Strains of Mice 419
HARRISON, Steadman D., Jr.: Toxicologic Evaluation of cis-Diamminedichloroplatinum II in B6D2F_1 Mice 382
HAUSER, W.: Therapeutic Effects of New Oximes, Benactyzine and Atropine in Soman Poisoning: Part II. Effect of HGG12, HGG42, and Obidoxime in Poisoning with Various Anticholinesterase Agents in Beagle Dogs 164
Effect of the Bispyridinium Oximes HGG12 and HGG42 and Ganglion Blocking Agents on Synaptic Transmission and NAD(P)HFluorescence in the Superior Cervical Ganglion of the Rat After Soman Poisoning *in vitro* 169
HAWKINS, Joseph E., Jr.: The Ototoxicity of Hydroxygentamicin, a New Aminoglycoside Antibiotic, in Guinea Pigs 395
HECK, Henry d'A.: Chemical Urolithiasis 2. Thermodynamic Aspects of Bladder Stone Induction by Terephthalic Acid and Dimethyl Terephthalate in Weanling Fischer-344 Rats 299
HILDERBRAND, Richard L.: Prediction of *in vivo* Kinetic Constants for Metabolism of Inhaled Vapors from Kinetic Constants Measured *in vitro* 403
HOBBS, Charles H.: Evaluation of a Multitiered Inhalation Exposure Chamber 8
Ocular Toxicity of 2,2,2-trifluoroethanol in Rabbits 313
HOLMSTEDT, B.: Quantitation of Free Soman in Nervous Tissue and Blood — A Preliminary Communication 148
HOOK, R.H.: Toxicity and Teratogenicity Studies with the Hypolipidemic Drug RMI 14,514 in Rats 19
HORNBUCKLE, W.E.: Assessment of Hepatic Function in Rabbits with Steroid-induced Cholestatic Liver Injury 329
HOUSTON, T.E.: Chlordecone Alcohol Formation in the Mongolian Gerbil *(Meriones Unguiculatus)*: A Model for Human Metabolism of Chlordecone (Kepone) 293

J

JENKINS, Lawrence J., Jr.: Prediction of *in vivo* Kinetic Constants for Metabolism of Inhaled Vapors from Kinetic Constants Measured *in vitro* 403
JERSEY, G.C.: Inhalation Toxicity of Acrylic Acid 271
JIAN-QUN, Zhou: Earthworm Muscle Preparation for Studying Several Potent Compounds — The Possible Existence of a "Soman Receptor" 222
JOHN, J.A.: Teratological Evaluation of Orthophenylphenol in Rats 282
JOSEPH, Xavier: Enhancement of Cardiotoxic Effects of β-Adrenergic Bronchodilators by Aminophylline in Experimental Animals 443

K

KALLFELZ, F.A.: Assessment of Hepatic Function in Rabbits with Steroid-induced Cholestatic Liver Injury 329
KARCZMAR, Alexander G.: Neuromyopharmacology as Related to Anticholinesterase Action 135
KARIYA, T.: Toxicity and Teratogenicity Studies with the Hypolipidemic Drug RMI 14,514 in Rats 19

KEYES, D.G.: A Thirteen Week Repeated Inhalation Study of Ethylene Dibromide in Rats 437
KHERA, K.S.: Common Fetal Aberrations and Their Teratologic Significance: A Review 13
KIRSCH, D.: Therapeutic Effects of New Oximes, Benactyzine and Atropine in Soman Poisoning: Part II. Effect of HGG12, HGG42, and Obidoxime in Poisoning with Various Anticholinesterase Agents in Beagle Dogs 164
Effect of the Bispyridinium Oximes HGG12 and HGG42 and Ganglion Blocking Agents on Synaptic Transmission and NAD(P)HFluorescence in the Superior Cervical Ganglion of the Rat after Soman Poisoning *in vitro* 169
KLAASSEN, Curtis D.: Pharmacokinetics in Metal Toxicity 353
KLEINSCHUSTER, Stephen J.: The Effects of Select Neurotoxic Chemicals on Synaptosomal Monoamine Uptake and K^+-dependent Phosphatase 432
KNOWLDEN, N.F.: Cancer: I. Analysis of Recent New Case Incidence Reports 458
KOCIBA, R.J.: A Thirteen Week Repeated Inhalation Study of Ethylene Dibromide in Rats 437
KOELLE, George B.: Organophosphate Poisoning — An Overview 129
KOSTYNIAK, Paul J.: Role of Chelating Agents in Metal Toxicity 376

L

LARSON, E.J.: Toxicity and Teratogenicity Studies with the Hypolipidemic Drug RMI 14,514 in Rats 19
LEE, I.P.: Studies on the Male Reproductive Toxicity of Freon 22 266
LEVINSKY, H.V.: Six Month Inhalation Studies of Pirbuterol Acetate Aerosol in the Beagle Dog and Squirrel Monkey 426
LIDDELL, Mary R.: The Ototoxicity of Hydroxygentamicin, a New Aminoglycoside Antibiotic, in Guinea Pigs 395
LINXIU, Wang: The Inhibition and Protection of Cholinesterase by Physostigmine and Pyridostigmine Against Soman Poisoning *in vivo* 217
LOEHR, R.: Heritable Translocation Study on Two Hair Dye Formulations 325
LOUGH, R.: Six Month Inhalation Studies of Pirbuterol Acetate Aerosol in the Beagle Dog and Squirrel Monkey 426
LUBBERS, Judith R.: Controlled Clinical Evaluations of Chlorine Dioxide, Chlorite and Chlorate in Man 334
LUNDGREN, G.: Quantitation of Free Soman in Nervous Tissue and Blood — A Preliminary Communication 148
LUNDIN, J.: Quantitation of Free Soman in Nervous Tissue and Blood — A Preliminary Communication 148

M

MAICKEL, Roger P.: The Role of Methemoglobin in Acute Butyl Nitrite Toxicity in Mice 448
MAINES, Mahin D., Ph.D.: Enzymatic Basis of Metal Ion Alterations of Cellular Heme and Glutathione Metabolism 358
MARSHAL, W.F.: Mutagenicity of Diesel Exhaust Particle Extracts: Influence of Car Type 260
MARSHALL, Thomas C.: Ocular Toxicity of 2,2,2-Trifluoroethanol in Rabbits 313
McCLELLAN, R.O.: Mutagenicity of Diesel Exhaust Particle Extracts: Influence of Car Type 260
Evaluation of a Multitiered Inhalation Exposure Chamber 8
McFADDEN, David P.: The Role of Methemoglobin in Acute Butyl Nitrite Toxicity in Mice 448
McILHENNY, H.M.: Six Month Inhalation Studies of Pirbuterol Acetate Aerosol in the Beagle Dog and Squirrel Monkey 426
McKENNA, M.J.: Inhalation Toxicity of Acrylic Acid 271
Inhalation Toxicity of Butylene Oxide 319
Metabolism of Acrylate Esters in Rat Tissue Homogenates 410
A Thirteen Week Repeated Inhalation Study of Ethylene Dibromide in Rats 437
MEETER, E.: Problems in the Therapy of Soman Poisoning 183
MERICKEL, Barbara S.: Ocular Toxicity of 2,2,2-Trifluoroethanol in Rabbits 313
MILLER, R.R.: Inhalation Toxicity of Acrylic Acid 271
Inhalation Toxicity of Butylene Oxide 319
Metabolism of Acrylate Esters in Rat Tissue Homogenates 410
MONTENARO, Maria J.: The Ototoxicity of Hydroxygentamicin, a New Aminoglycoside Antibiotic, in Guinea Pigs 395
MURRAY, F.J.: Teratological Evaluation of Orthophenylphenol in Rats 282
MUTTER, L.C.: Chlordecone Alcohol Formation in the Mongolian Gerbil *(Meriones Unguiculatus)*: A Model for Human Metabolism of Chlordecone (Kepone) 293

N

NAMAN, T.M.: Mutagenicity of Diesel Exhaust Particle Extracts: Influence of Car Type 260
NEIDL, Michael J.: The Ototoxicity of Hydroxygentamicin, a New Aminoglycoside Antibiotic, in Guinea Pigs 395
NEWTON, Michael: Potential Exposure of Humans to 2,4,5-T and TCDD in the Oregon Coast Ranges 339
NITSCHKE, K.D.: A Thirteen Week Repeated Inhalation Study of Ethylene Dibromide in Rats 437
NORDGREN, Ingrid: Quantitation of Metrifonate and Dichlorvos in Blood and Tissues by Gas Chromatography — Mass Spectrometry 230
NORRIS, Logan A.: Potential Exposure of Humans to 2,4,5-T and TCDD in the Oregon Coast Ranges 339

O

O'FLAHERTY, E.J.: Renal Reabsorption and Secretion of δ-Aminolevulinic Acid in the Rat 273
OHTA, Yhukou: Neuromyopharmacology as Related to Anticholinesterase Action 135
O'NEILL, John J.: Non-cholinesterase Effects of Anticholinesterases 154

P

PETRAS, J.M.: Soman Neurotoxicity 242
POPP, James A.: Induction of Hepatic and Testicular Lesions in Fischer-344 Rats by Single Oral Doses of Nitrobenzene 389

Q

QUAST, J.F.: Inhalation Toxicity of Butylene Oxide 319
QURESHI, S.: Six Month Inhalation Studies of Pirbuterol Acetate Aerosol in the Beagle Dog and Squirrel Monkey 426

R

RAMPY, L.W.: Metabolism of Acrylate Esters in Rat Tissue Homogenates 410
RAO, K.S.: Teratological Evaluation of Orthophenylphenol in Rats 282
RICKERT, Douglas E.: Induction of Hepatic and Testicular Lesions in Fischer-344 Rats by Single Oral Doses of Nitrobenzene 389
RIDLINGTON, J.W.: Interactions of Selenium and Antioxidants with Mercury, Cadmium and Silver 368
ROBERTS, Stanley A.: Tolerance Development to Cadmium-induced Decrease in Hepatic Oxidative Xenobiotic Metabolism and Cytochrome P-450 Content in the Male Rat 286
ROTH, Robert A.: Lack of Protection by Ascorbic Acid from Lethality Resulting from Exposure to 1 Atm O_2 386
ROYER, R.E.: Mutagenicity of Diesel Exhaust Particle Extracts: Influence of Car Type 260

S

SALSBURG, David: Re-examination of the ED_{01} Study — Adjusting for Time on Study 67
Re-examination of the ED_{01} Study — Technical Discussion of the Statistical Analysis for Adjusting for Time on Study 81
SANTESSON, J.: Quantitation of Free Soman in Nervous Tissue and Blood — A Preliminary Communication 148
SCHNELL, R. Craig: Tolerance Development to Cadmium-induced Decrease in Hepatic Oxidative Xenobiotic Metabolism and Cytochrome P-450 Content in the Male Rat 286
Perspectives in Metal Toxicity 347
SCHWETZ, B.A.: Teratological Evaluation of Orthophenylphenol in Rats 282
SEIZINGER, D.E.: Mutagenicity of Diesel Exhaust Particle Extracts: Influence of Car Type 260
SHAIKH, Zahir A.: Metallothionein in Plasma and Urine of Cadmium-exposed Rats Determined by a Single-antibody Radioimmunoassay 1
SHARMA, Raghubir P.: The Effects of Select Neurotoxic Chemicals on Synaptosomal Monoamine Uptake and K^+-dependent Phosphatase 432
SHILOFF, J.D.: Differences in the Toxicity of Soman in Various Strains of Mice 419
SHUQUI, Pei: The Inhibition and Protection of Cholinesterase by Physostigmine and Pyridostigmine Against Soman Poisoning *in vivo* 217
SIELKEN, Robert: Re-examination of the ED_{01} Study — Risk Assessment Using Time 88
SIPES, I. Glenn: Detection of Covalently Bound Halothane Metabolites in the Hypoxic Rat Model for Halothane Hepatotoxicity 255
SMITH, Jerry: Re-examination of the ED_{01} Study — Overview 28
STERRI, Sigrun H.: Factors Modifying the Toxicity of Organophosphorous Compounds Including Soman and Sarin 143
SUZUKI, K.: Studies on the Male Reproductive Toxicity of Freon 22 266
SZINICZ, L.: Therapeutic Effects of New Oximes, Benactyzine and Atropine in Soman Poisoning: Part I. Effects of Various Oximes in Soman, Sarin, and Vx Poisoning in Dogs 161

T

TAYLOR, E.: Renal Reabsorption and Secretion of δ-Aminolevulinic Acid in the Rat 278
TENNANT, B.C.: Assessment of Hepatic Function in Rabbits with Steroid-induced Cholestatic Liver Injury 329
TING-CHUNG, Chou: Earthworm Muscle Preparation for Studying Several Potent Compounds — The Possible Existence of a "Soman Receptor" 222
TOHYAMA, Chiharu: Metallothionein in Plasma and Urine of Cadmium-exposed Rats Determined by a Single-antibody Radioimmunoassay 1

V

VAN RYZIN, John: Re-examination of the ED_{01} study — Review of Statistics: The Need for Realistic Statistical Models for Risk Assessment 124

W

WEGER, N.: Therapeutic Effects of New Oximes, Benactyzine and Atropine in Soman Poisoning: Part I. Effects of Various Oximes in Soman, Sarin, and Vx Poisoning in dogs 161
Therapeutic Effects of New Oximes, Benactyzine and Atropine in Soman Poisoning: Part II. Effect of HGG12, HGG42, and Obidoxime in Poisoning with Various Anticholinesterase Agents in Beagle Dogs 164
Effect of the Bispyridinium Oximes HGG12 and HGG42 and Ganglion Blocking Agents on Synaptic Transmission and NAD(P)HFluorescence in the Superior Cervical Ganglion of the Rat After Soman Poisoning *in vitro* 169
WHANGER, P.D.: Interactions of Selenium and Antioxidants with Mercury, Cadmium and Silver 368
WHITEHURST, Virgil E.: Enhancement of Cardiotoxic Effects of β-Adrenergic Bronchodilators by Aminophylline in Experimental Animals 443
WOLFF, R.K.: Evaluation of a Multitiered Inhalation Exposure Chamber 8
WOLTHUIS, O.L.: Problems in the Therapy of Soman Poisoning 183

Y

YARRINGTON, J.T.: Toxicity and Teratogenicity Studies with the Hypolipidemic Drug RMI 14,514 in Rats 19
YOUNG, John T.: Histopathologic Examination of the Rat Nasal Cavity 309

1981 Subject Index

A

aberrations, significance of fetal 13
acrolein, inhalation of 271
acrylamide, effects of 432
acrylate esters, binding with sulfhydryls 410
metabolism in tissue 410
reaction with glutathione 410
acrylic acid, inhalation toxicity 271
reaction *in vitro* 410
aerosols, exposure chamber for 8
see inhalation studies
of pirbuterol acetate 426
aliesterases, modification of toxicities 143
Ames test, with trifluoroacetaldehyde 415
with trifluoroacetate 415
with trifluoroethanol 415
aminoglycoside antibiotic, hydroxygentamicin an 395
aminolevulinic acid, renal resorption of 278
renal secretion of 278
aminophylline, cardiotoxic effects of 443
antibodies, for metallothionein assay 1
anticholinesterase, neuromyopharmacology of 135,246
non-cholinesterase effects of 154
organic phosphates 129,214,243
antioxidants, interaction with selenium 368
ascorbic acid, in oxygen toxicity 386
atropine, for Sarin poisoning 161
for Soman poisoning 161,169,214,243
for Vx poisoning 161

B

behavioral effects, of metals 348
benactyzine, for Sarin poisoning 161
for Soman poisoning 161,164
for Vx poisoning 161
benzene, metabolism kinetics 403
bioactivation, of halothanes 255
bispyridinium oximes, pharmacology of 193
treating Soman poisoning 169
toxicity of 193
blood, measurement dichorovos in 230,253
measurement metrifonate in 230,253
measurement of Soman in 148
bladder stones, induction of 299
brain damage, from Soman 242,419
bronchodilators, cardiotoxic effects of 443
bronchodialators, pirbuterol acetate 426
butyl acrylate, metabolism in tissue 410
butyl nitrite, inhalation of 448
methemoglobin formation 448
butylene oxide, inhalation toxicity of 319
butyrylcholinesterase, function of 129

C

cadmium, clearance from plasma 452
development of tolerance to 286
inhibition by selenium 368
inhibition by zinc 452
metallothionein from 1
pharmacokinetics of 353
cancer, analysis of incidence reports 457
carcinogenesis, risk assessment of 88
carcinogenicity, ED_{10} study 28
carcinogens, heavy metals as 348
cardiotoxic effects, by aminophylline 443
chelating agents, in metal toxicity 376
chamber, for inhalation exposures 8
chlorate, clinical evaluation in man 335
chlordecone, also see Kepone
metabolism of 293
chlordecone alcohol, in Mongolian gerbils 293
chlorine dioxide, clinical evaluation in man 335
chlorite, clinical evaluation in man 335
cholestatic liver injury, steroid induced 329
cholesterol, effects of Freon-22 266
cholinesterase inhibition, see organophosphates and Soman
treatment of 214,217
chromatographic analysis, of Soman 177
chromosomal effects, of hair dyes 325
circadian, susceptibility to Soman 238
cis-diamminedichloroplatinum II, toxicology of 382
creatine phosphokinase, in irritancy testing 290
cytochrome P, inhibition by cadmium 286

D

dermal contact, with TCDD 339
with 2,4,5-T 339
dichlorovos, measurement in blood 230,253
measurement in tissue 230,253
diesel exhaust, mutagenicity of 260
diisopropylfluorophosphate, effects of 432
dimethyl terephthalate, bladder stones from 299
dyes, chromosomal effects of 325
hair 325

E

earthworm muscle, test of cholinesterase inhibition 222
ED_{01} Study, adjustment for time 67
conclusions regarding 127
data from 36
overview of 28
pathology of 64
risk assessment of 88,124
statistical analysis of 81,124
embryotoxicity, of o-phenylphenol 282
enteric, treatment of metal poisoning 376
enzymes, effect of metal ions 358
ethinylestradiol, hepatic effects of 329
ethyl acrylate, metabolism in tissue 410
ethylene dibromide, inhalation of 437
exposure chamber, effect of position in 8
multitiered 8
extracorporeal, treatment of metal poisoning 376
eye, effects of 2,2,2-trifluoroethanol 313

F

fetal aberrations, teratologic significance of 13
5-tetradecyloxy-2-fuoric acid, effects of 19
also see hypolipidemic drugs
forestry, chemical exposures 339
Freon-22, effect on male reproductivity 266

G

gamma amino butyric acid, action of 222
ganglion blocking, agents 169
gas chromatography, of Soman 177
gentamicin, ototoxicity of 395

gerbils, Kepone metabolism in 293
glutathione, reaction with acrylates 410
glutathione metabolism, metal ions in 358

H

hair dyes, chromosomal effects of 325
halocarbons, ethylene dibromide 437
halothane metabolites, covalent bound 255
in hepatotoxicity 255
heme metabolism, metal ions in 358
hepatic effects, of cadmium 286
of ethinylestradiol 329
of methylestosterone 329
hepatic lesions, from nitrobenzene 389
hepatotoxicity, of halothanes 255
heritable translocation, effect of hair dyes 325
hexamethonium bromide, treating Soman poisoning 169
hydronephrosis, significance of 13
hydroxygentamicin, ototoxicity of 395
hypolipidemic drugs, RMI 14,514 19
hyroxygentamicin, an aminoglycoside antibiotic 395

I

inhalation, of acrylic acid 271
of butylene oxide 319
of ethylene dibromide 437
exposure chamber for 8
of pirbuterol acetate 426
inhibition, of cadmium 452
insecticides, see organophosphates
irritation, intramuscular 290
testing of 290

K

K-dependent phosphatase, effects of chemicals on 432
kanamycin, ototoxicity of 395
kepone, also see chlordecone
effects of 432
metabolism of 293
kinetic constants, of metabolism 403
prediction of 403

L

lipoprotein-X, in liver damage 329
liver damage, steroid induced 329
liver lesions, from nitrobenzene 389

M

mercury, inhibition by selenium 368
metabolism, of acrylate esters 410
kinetic constants of 403
metabolites, of trifluoroethanol 415
metal ions, alteration of cellular heme 358
in glutathione metabolism 358
metal toxicity, chelating agents 376
an overview 348
pharmacokinetics in 353
symposium 347
symposium remarks 381
treatment approaches 376
metallothionein, in cadmium tolerance 286
indicator of cadmium exposure 1
in plasma 1
radioimmunoassay for 1
in urine 1
metals, behavioral effects of 348
as carcinogens 348
as mutagens 348
neurotoxicity of 348
methemoglobin, from butyl nitrite 448
methyl acrylate, metabolism in tissue 410
methylene blue, protection from methemoglobin 448
methylestosterone, hepatic effects of 329
metrifonate, measurement in blood 230,253
measurement in tissue 230,253
metyrapone, in halothane binding 255
musculoirritancy, testing in rabbits 290
mutagenicity, absence with trifluoroethanol 415
of diesel exhaust 260
of o-phenylphenol 282
mutagens, heavy metals as 348

N

nasal cavity, histopathologic examination of 309
of rats 309
nerve agents, see organophosphates
nerve tissue, measurement of Soman in 148,248
neuromyal effects, of anticholinesterases 135,246
of sodium fluoride 135,246
neuromyopharmacology, of anticholinesterase action 135,246
neurotoxic effects, on K-dependent phosphatase 432
on synaptosomal monoamine uptake 432
neurotoxicity, of metals 348
of Soman 242,419
nitrobenzene, hepatic lesions from 389
oral toxicity 389
testicular lesions from 389
non-cholinesterase effects, of anticholinesterases 154
norepinephrine, inhibition of 432

O

obidoxime, for Soman poisoning 164
ocular toxicity, of 2,2,2-trifluoroethanol 313
o-phenylphenol, teratologic potential 282
Oregon, exposures to TCDD 339
exposures to 2,4,5-T 339
organophosphate poisoning, overview of 129,243
organophosphates, also see dichlorovos
factors in toxicity of 143
also see metrifonate
non-cholinesterase effects of 154
Soman poisoning 161,164,169,173,183,193
ototoxicity, of hydroxygentamicin 395
oximes, therapeutic effects of 161,214,249,250
treating organophosphate poisoning 161,214,249
treating Sarin poisoning 161,249
treating Soman poisoning 161,164,183,203,250
treating Vx poisoning 149,161
oxygen toxicity, ascorbic acid in 386

P

paraoxon, effects of 432
particulates, from diesel exhaust 260
pathology audit, of ED_{01} Study 64
peptides, response to anticholinesterases 154
pharmacokinetics, in metal toxicity 353
of Soman 177
phosphatase, neurotoxic effects on 432
physostigmine, protective action of 217
pirbuterol acetate, inhalation exposures to 426
plasma, metallothionein in 1

pyridostigmine, prevention of organophosphate poisoning 164,214,217
protective action 217

R

RMI 14,514, hypolipidemic drug 19
radioimmunoassay, for metallothionein 1
rats, nasal histopathology of 309
renal resorption, of delta-aminolevulinic acid 278
renal secretion, of delta-aminolevulinic acid 278
reports, analysis of new case incidence 457
reproductivity, effects of Freon-22 266
risk assessment, for carcinogenesis 88
of ED_{01} Study 88
models for 124

S

Salmonella Typhimurium, with trifluoroethanol 415
Sarin, factors in toxicity of 143
Sarin poisoning, treatment of 161,203
selenium, inhibition of cadmium 368
inhibition of mercury 368
inhibition of silver 368
protective action of 368
serine proteases, organophosphates effects on 154
serotonin, inhibition of 432
serum cholesterol, effects of Freon-22 266
silver, inhibition by selenium 368
sodium fluoride, neuromyal effects of 135,246
Soman, brain damage from 242,419
circadian susceptibility 238
factors in toxicity of 143
gas chromatography of 177
measurement in blood 148
measurement in nerve tissue 148,248
neurotoxicity of 242,419
pharmacokinetics of 177,193
stereoisomers of 177
Soman poisoning, perspectives of 203,251
treatment of 161,164,169,183,217,250
Soman receptors, existence of 222
statistical analysis, of ED_{01} Study 81,124
stereoisomers, of Soman 177
sternum, fetal aberrations of 13
steroid, induced liver damage 329
sulfhydryls, binding of acrylates 410
supernummary rib, fetal aberrations 13
symposium, on metal toxicity 347,381
synaptosomal monoamine, neurotoxic effects on 432

T

TCDD, exposures of humans 339
teratogenicity, of hypolipidemic drugs 19
of o-phenylphenol 282
teratology, fetal aberrations in 13
terephthalic acid, bladder stones from 299
testicular lesions, from nitrobenzene 389
tetrachlorodibenzo-p-dioxin, see TCDD
time adjustment, in cancer study 67,88
tissue, measurement dichlorovos in 230,253
measurement metrifonate in 230,253
tolerance, to cadmium 286
toluene, metabolism kinetics 403
toxicity, of acrylic acid 271
of butylene oxide 319
of cis-diamminedichloroplatinum II 382
of Freon-22 266
of hypolipidemic drug 19
metal symposium 347
mice in prediction of 382
of organophosphates 143
of Sarin 143
of Soman 143,242,419
toxicity studies, of rat nasal cavity 309
toxicology, of bispyrdinium oximes 193
of ethylene dibromide 437
treatment, of heavy metal poisoning 376
trifluoroacetaldehyde, Ames test with 415
trifluoroacetate, Ames test with 415
trifluoroethanol, Ames test with 415
in Salmonella Typhimurium 415
2-acetylaminofluorene, in cancer study 28
see ED_{01} Study
2,4,5-T, exposure of humans 339
2,4,5-trichlorophenoxyacetic acid, see 2,4,5-T
2,2,2-trifluoroethanol, ocular toxicity of 313

U

urine, indicator of 2,4,5-T exposure 339
metallothionein in 1
urolithiasis, from terephthalates 299

V

Vx poisoning, treatment of 161

W

water treatment, chemicals in 335

X

xenobiotic metabolism, inhibition by cadmium 286

Z

zinc, effect on cadmium kinetics 452
inhibition of cadmium 452